

Serial No. 10/708,042
AMENDMENT AND
RESPONSE TO OFFICE ACTION

11. (Cancelled).

12. (Previously Presented) Solid oxide fuel cell with internal reforming capability comprising:

a cathode;

an anode;

an electrolyte disposed between the anode and the cathode, wherein the electrolyte is a solid electrolyte comprising a yttria-stabilized zirconia;

a cathodic current collector;

an anodic current collector, the cathode, anode and electrolyte disposed between the cathodic current collector and the anodic current collector;

a cathodic interconnect electrically connecting the cathode to the cathodic current collector, the cathodic interconnect comprising a metallic substrate providing a flow field between the cathode and the cathodic current collector for an oxygen containing gas flow over at least a portion of the cathode; and

an anodic interconnect electrically connecting the anode to the anodic current collector, the anodic interconnect comprising a metallic substrate providing a flow field between the anode and the anodic current collector for a fuel gas flow over at least a portion of the anode and a catalytic coating on the metallic substrate, the flow field being bounded at least in part by the anode, the anodic current collector, and the metallic substrate, and the catalytic coating on the metallic substrate comprising a catalyst capable of catalytic conversion of a hydrocarbon fuel in the fuel gas to a hydrogen rich reformat such that the hydrogen rich reformat is oxidized at the anode to generate electric power;

wherein the metallic substrate of the anodic interconnect has an offset plate fin or dimple configuration and includes a first uncoated portion electrically connected to the anode, a second uncoated portion electrically connected to the anodic current collector, and a spacing portion extending between the first and second uncoated portions for spacing the anode from the anodic current collector and forming the space for the fuel gas flow.

13-20. (Cancelled)